

Idaho National Engineering and Environmental Laboratory

The INEEL Conceptual Model

A Fresh Look at INEEL Waters

Deliverable September 30, 2002

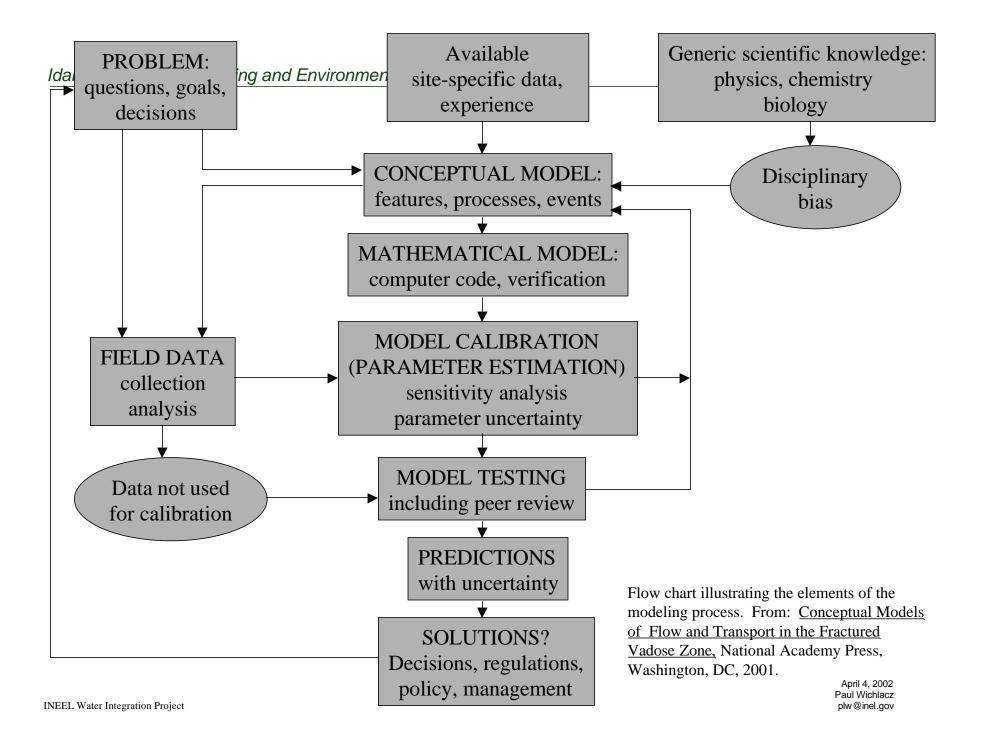
4/4/02



Conceptual Model

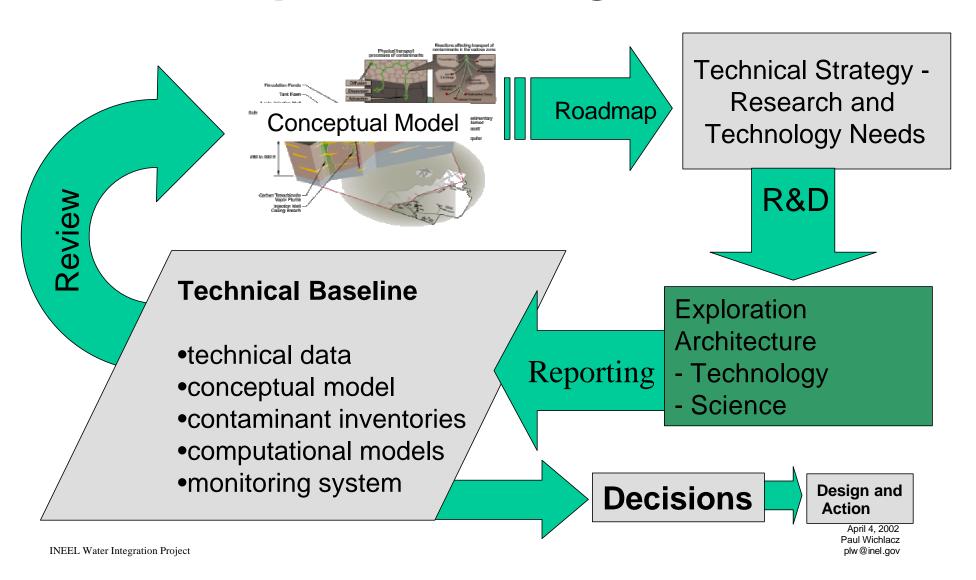
A conceptual model is an evolving hypothesis identifying the important features, processes, and events controlling fluid flow and contaminant transport of consequence at a specific field site in the context of a recognized problem

From: Conceptual Models of Flow and Transport in the Fractured Vadose Zone, National Academy Press, Washington, DC, 2001.





Conceptual Modeling Process





3 Products

- Background (summary) document (9/30/02)
- The Conceptual Model Itself (Draft 1, 9/30/02, Electronic web based version, Late 2004)
- Management Plan for Conceptual Model (MCP ???) (9/30/03)



Background of INEEL Conceptual Models

- Summary description of the INEEL regional and subregional groundwater models that are currently in use.
- Description of how they are used.
- Analysis of uncertainties and research needed for resolution.



Path Forward

Task 1- Define the bounds of the Conceptual Model (4/12/02)

- Organize Primary Technical Team
- Develop scope, schedule and budget for "Summary"
- Develop publication, configuration, and Info. Mgmt plans
- Task 2 Hold Technical group meetings (April-July)
- Atmosphere
- Hydrology
- Geology
- Biogeochemistry
- Contaminant source/receptor



Path Forward: cont.

Task 3 -Integrate and Publish (August -September)

- Team Leaders formulate the Model (FY-02)
- Have the Big Workshop (FY-02)
- Put "it" on the web (FY-sometime later)
- Publish it in the open literature (FY-03-04)



Initial Meeting

- Purpose: To define the framework and bounds of the conceptual model and to develop a process for it's development
- When: April 9, 2002, 1/2 day long
- Where: TBD, probably offsite
- Who: Interested technical people who will be able to stick with the project till it's completion
- How: Collaboratively agree to develop a Conceptual Model